RIMFAX Antenna NTE Progression

June 29, 2017

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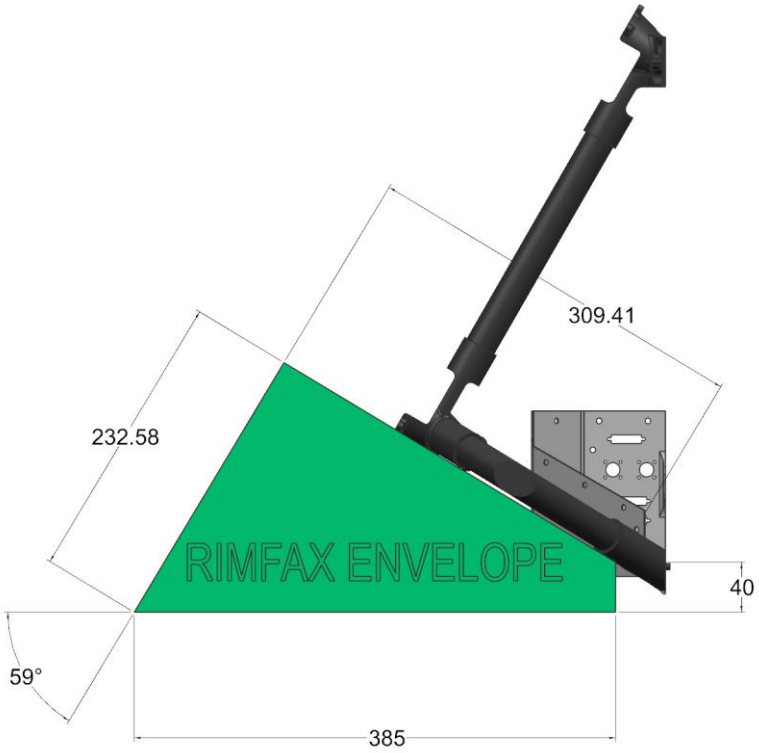
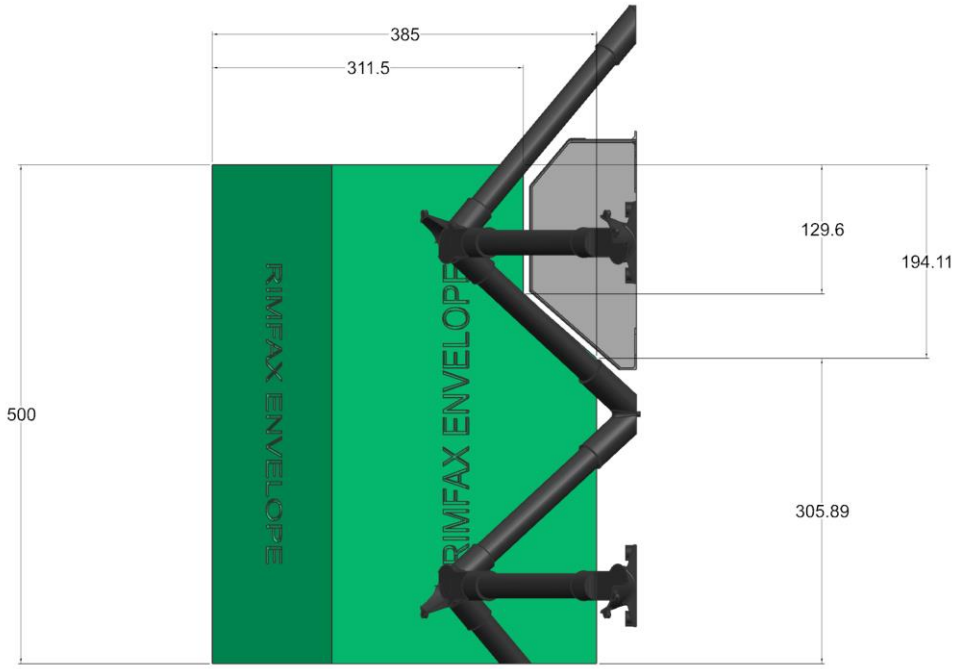
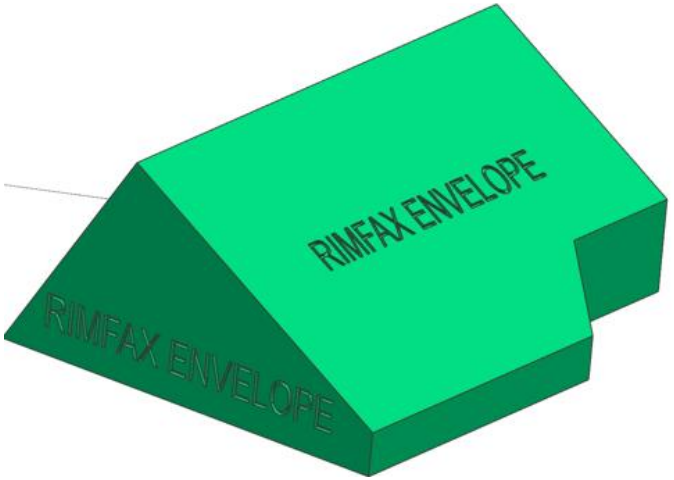
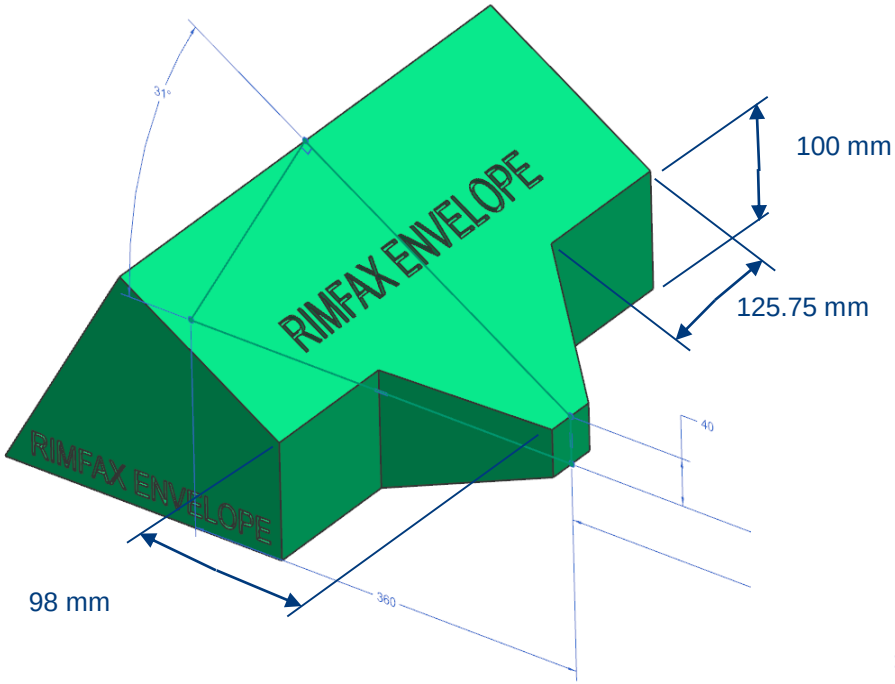
RIMFAX Antenna Envelope Dimensions – November (Rev A)

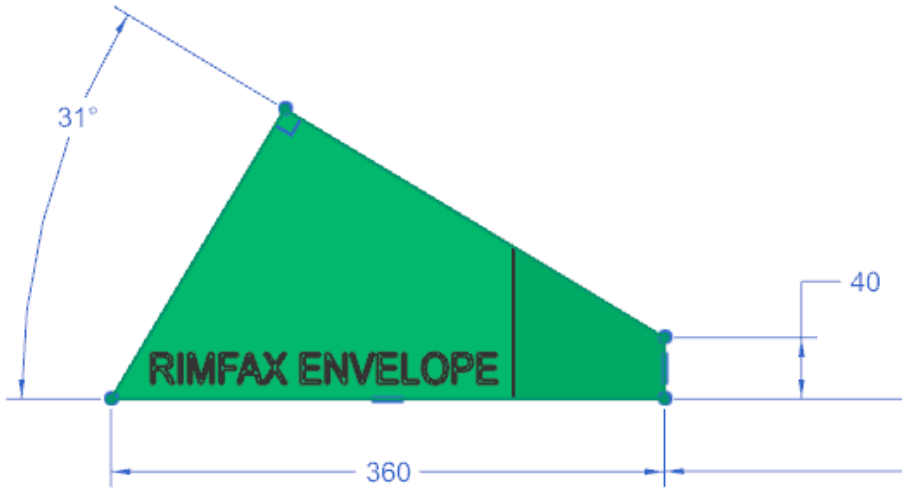




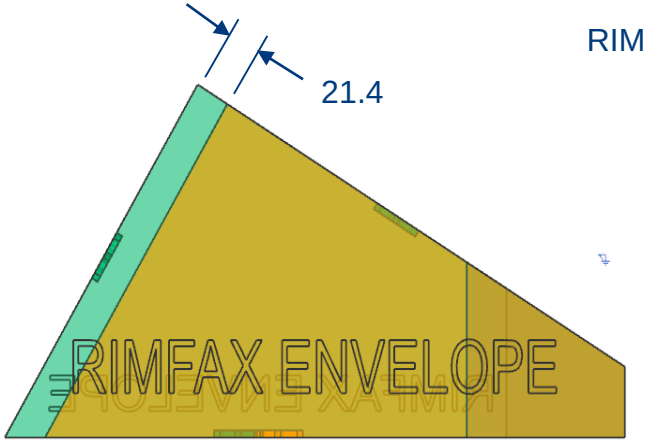


RIMFAX Antenna Envelope Dimensions – December, 2014 (Rev B)



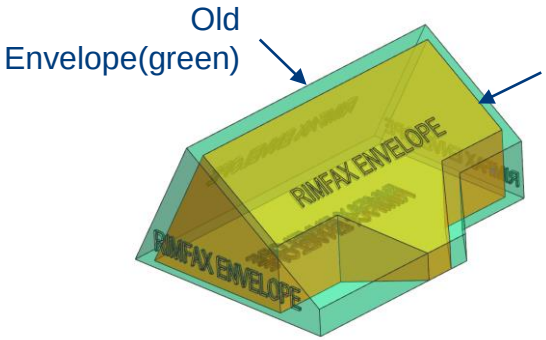


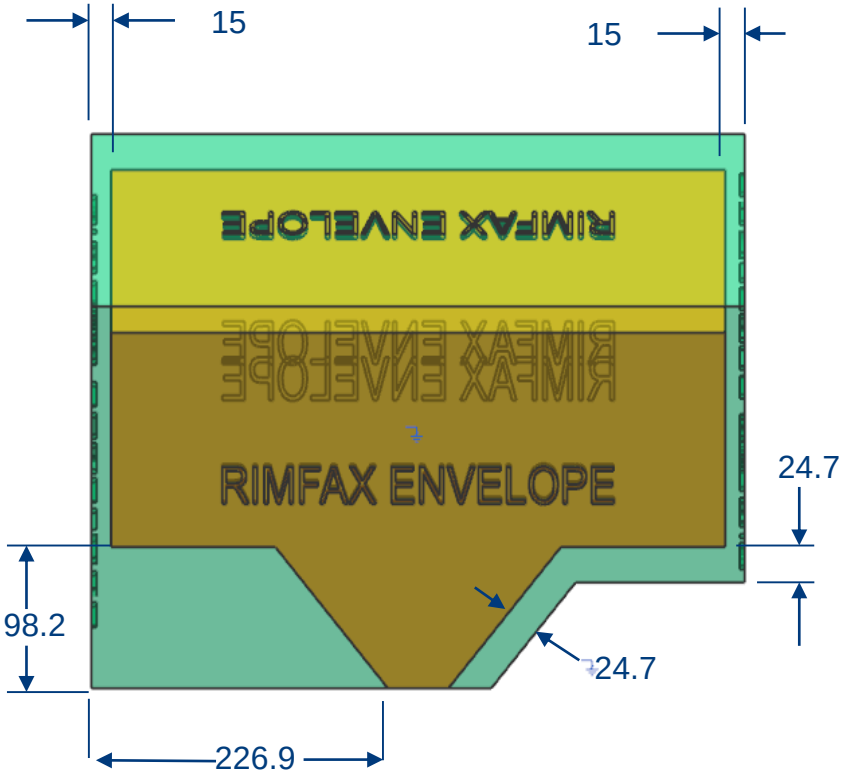
RIMFAX Antenna Envelope Rev B vs Rev A



RIMFAX ENVELOPE

Units in mm
- Old volume = 21,063,893 mm^3
- New volume = 16,020,397 mm^3

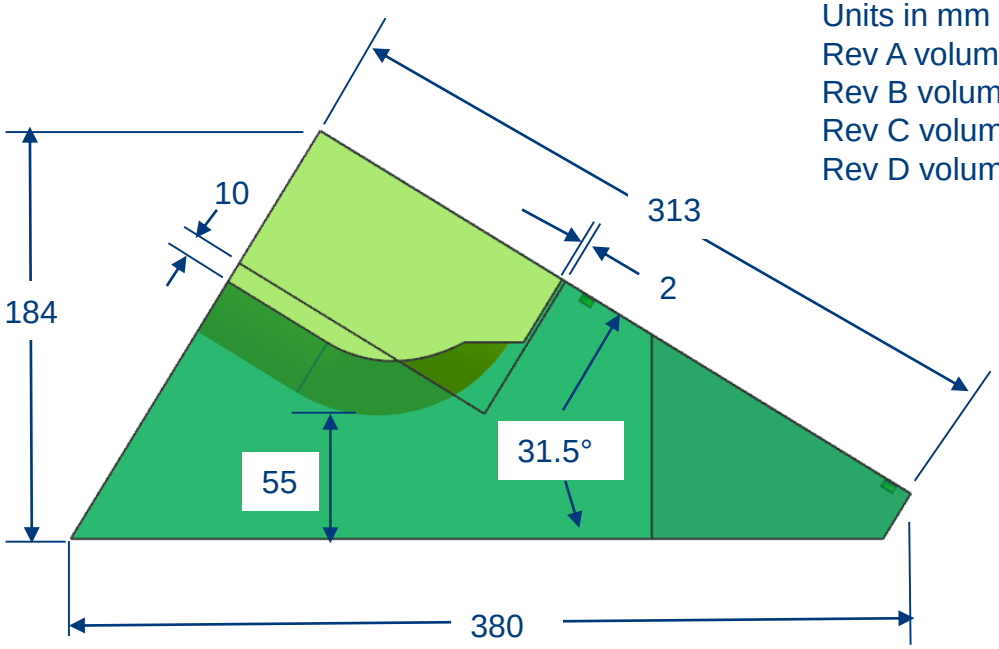


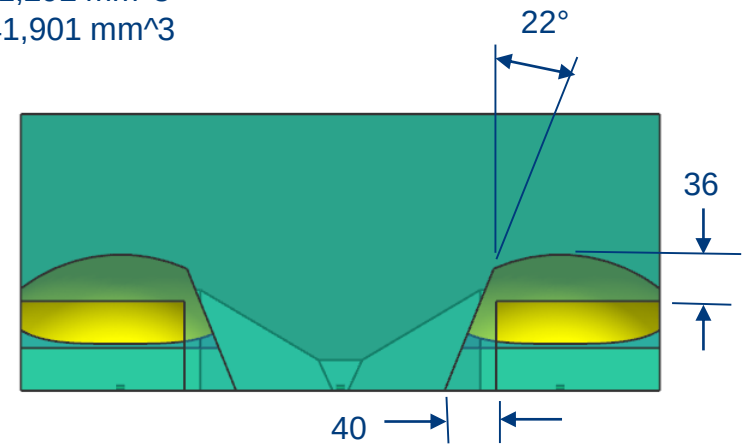


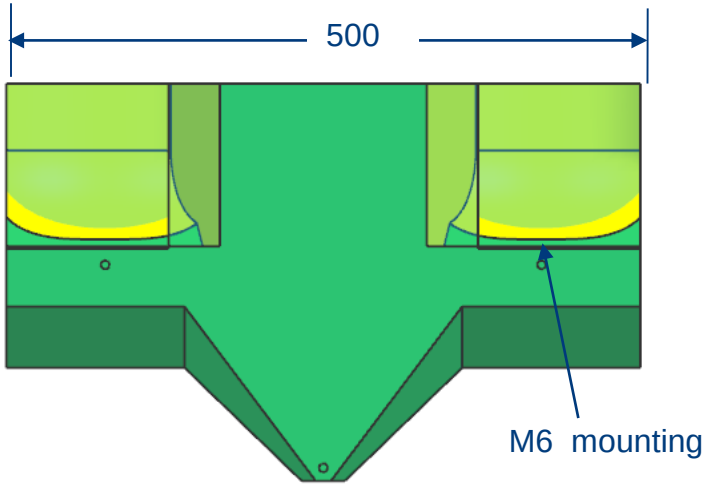
RIMFAX Antenna Envelope Rev D vs Rev C

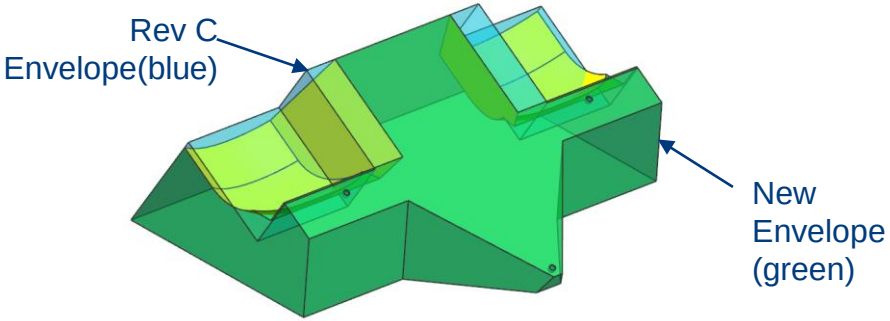
RIMFAX ENVELOPE

Units in mm
Rev A volume = 21,063,893 mm^3
Rev B volume = 16,032,379 mm^3
Rev C volume = 14,111,292 mm^3
Rev D volume = 13,041,901 mm^3

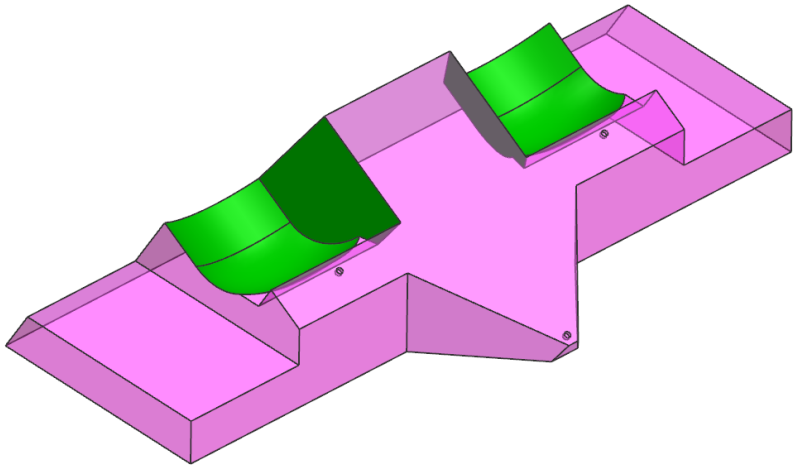


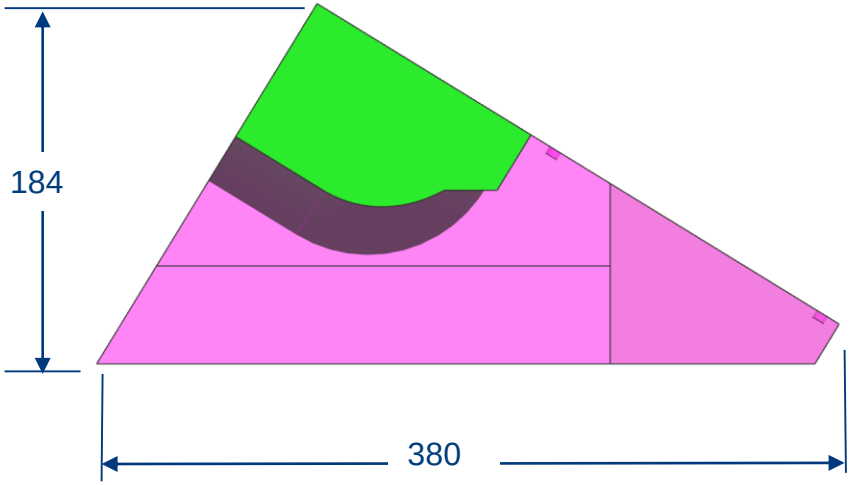


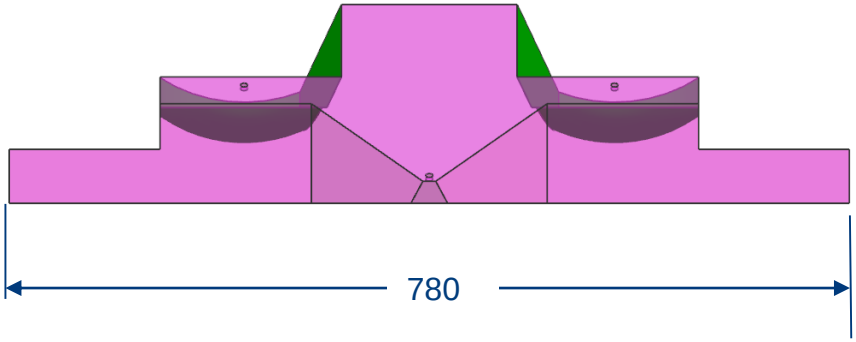




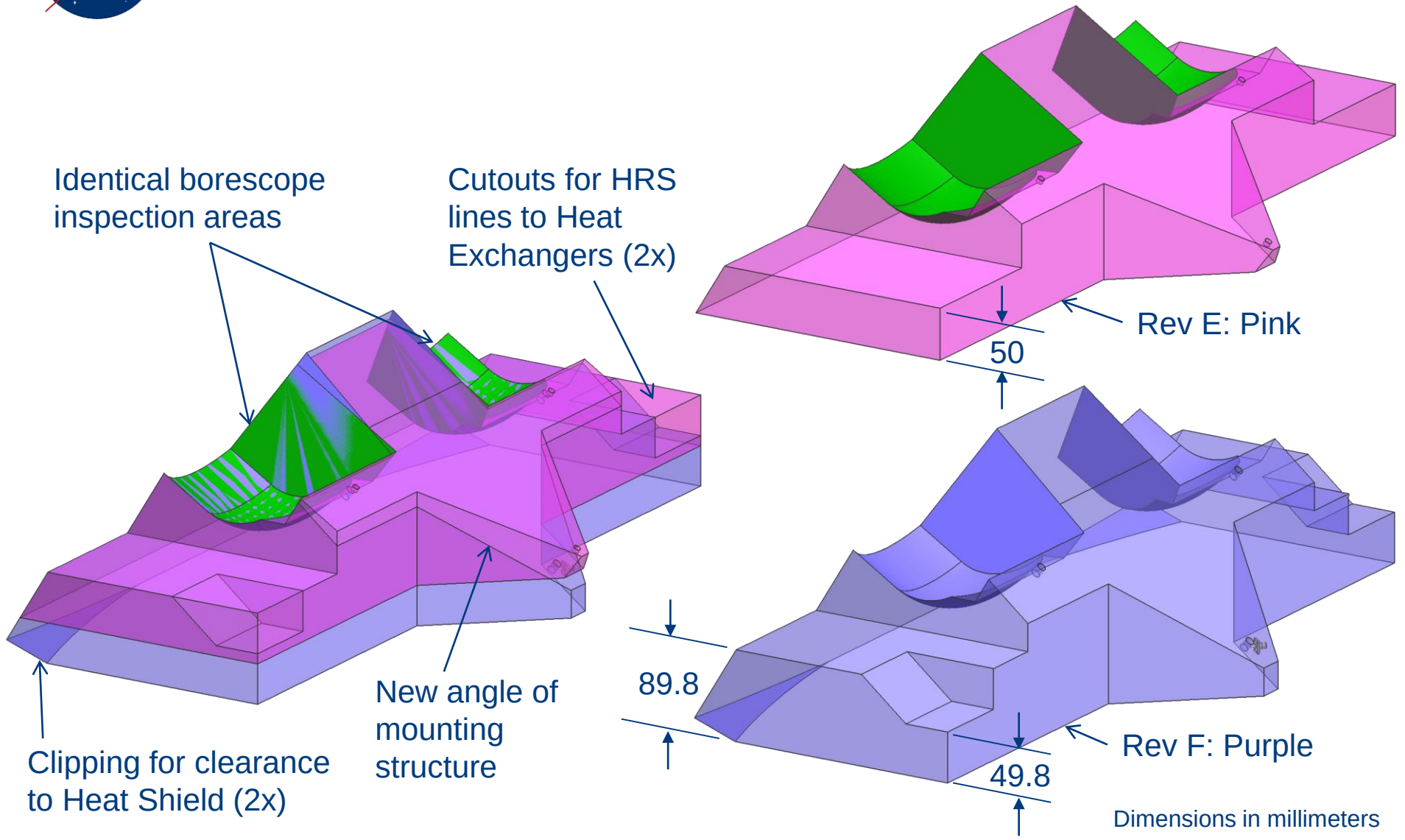
RIMFAX Antenna Envelope Rev E



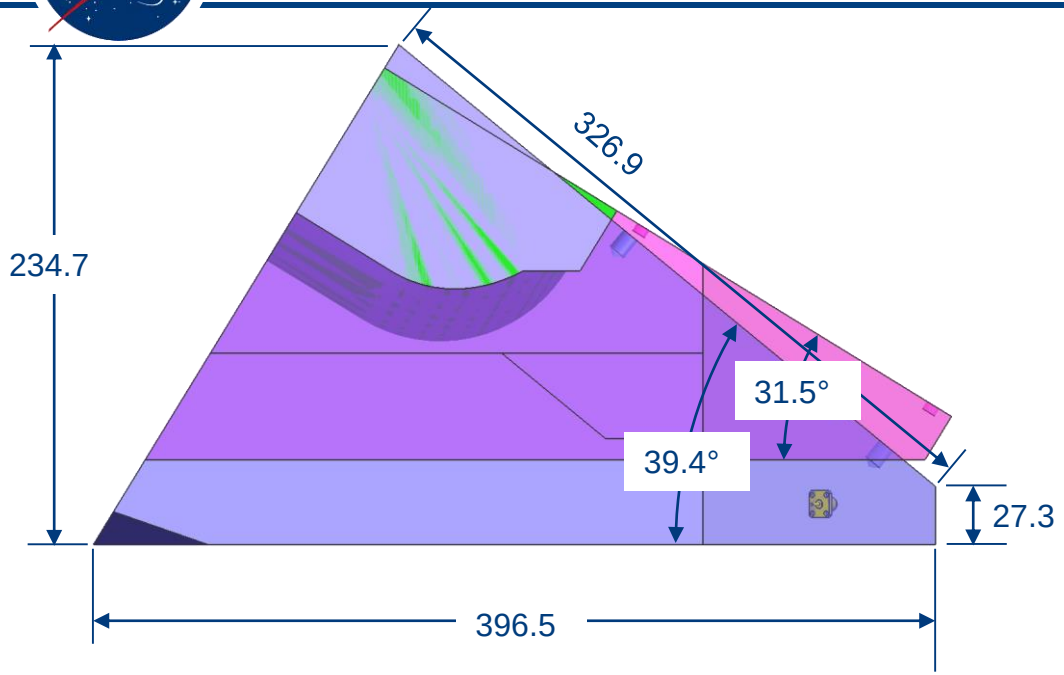




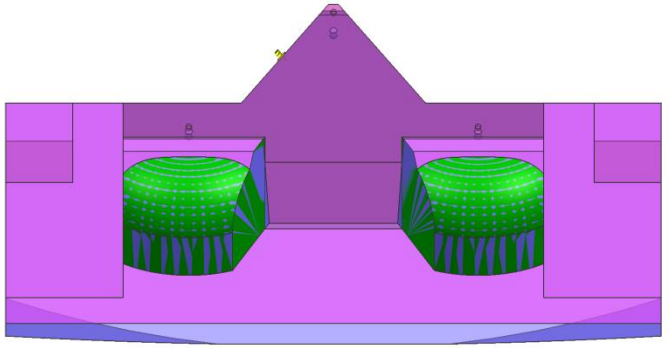
RIMFAX Antenna Envelope Rev F vs Rev E

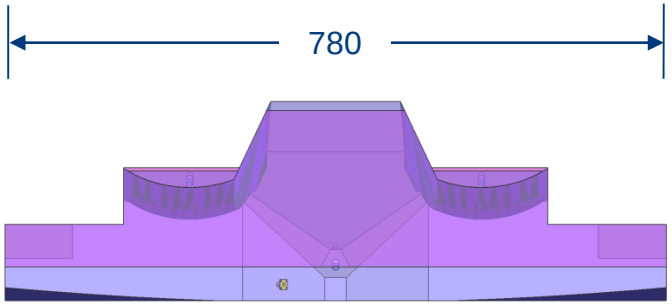


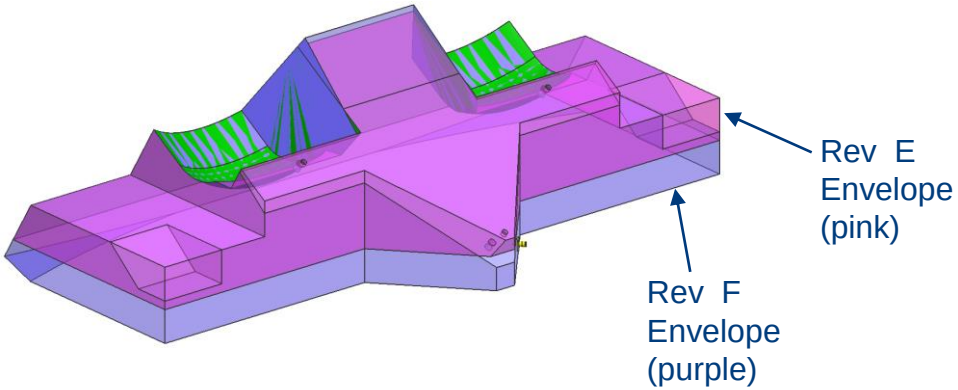
RIMFAX Antenna Envelope Rev F vs Rev E



Volume Progression:
Rev A volume = 21,063,893 mm^3
Rev B volume = 16,032,379 mm^3
Rev C volume = 14,111,292 mm^3
Rev D volume = 13,041,901 mm^3
Rev E volume = 16,502,600 mm^3 (extended env)
Rev F volume = 24,640,139 mm^3 (V15 rvr config)

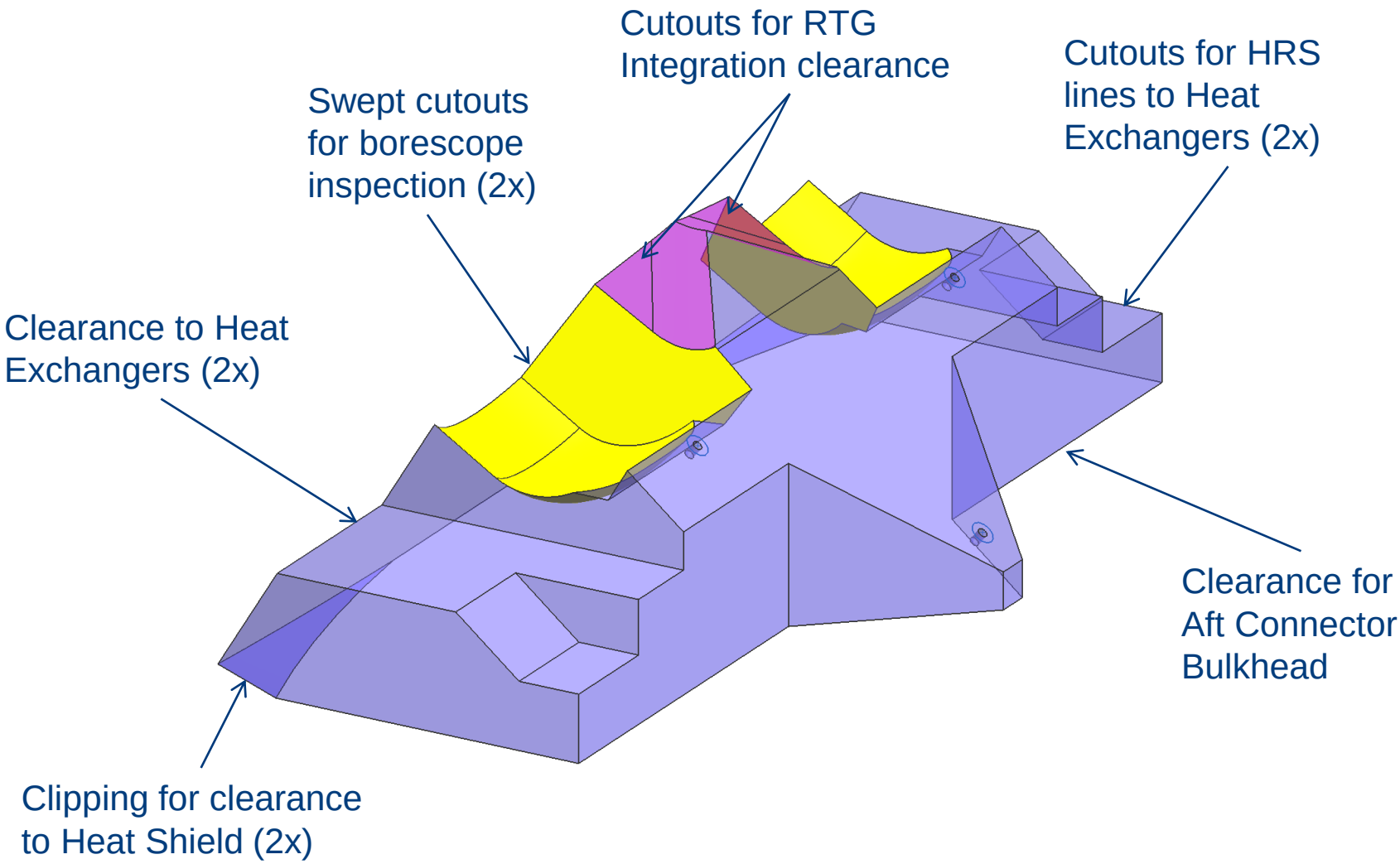




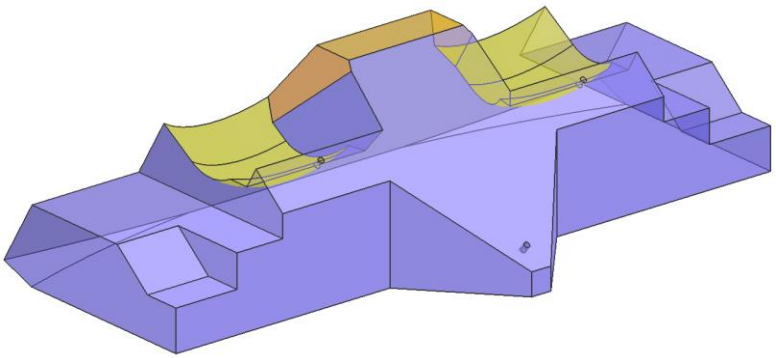


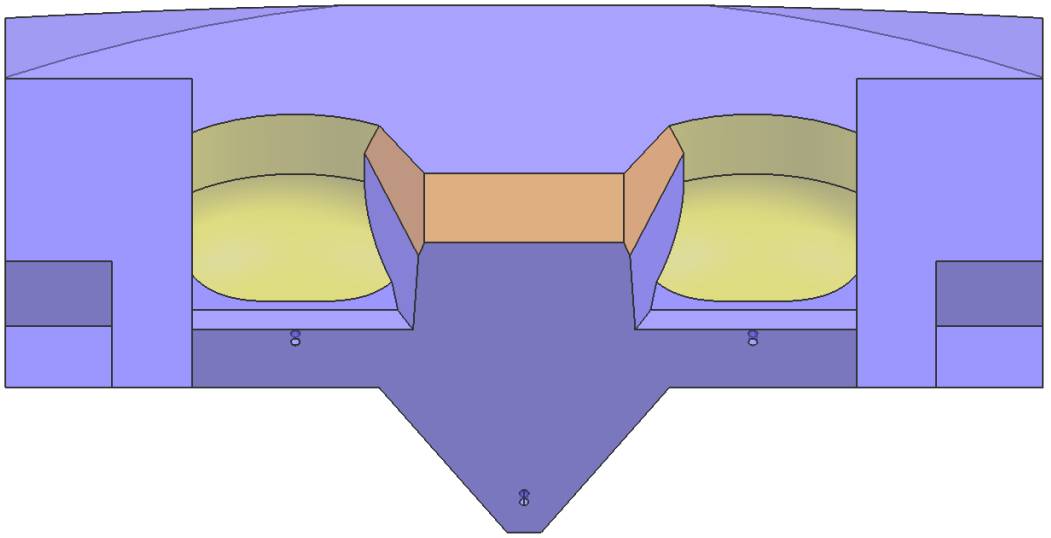
Dimensions in millimeters

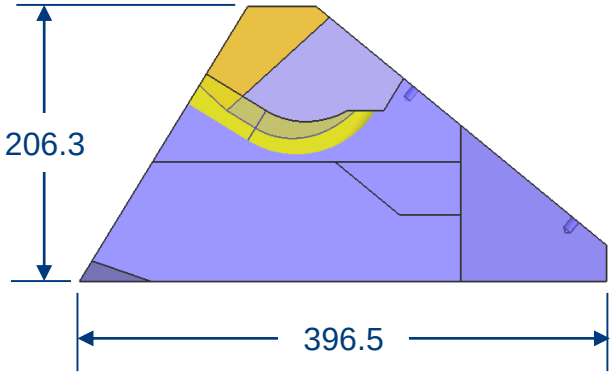
RIMFAX Antenna Envelope Rev G

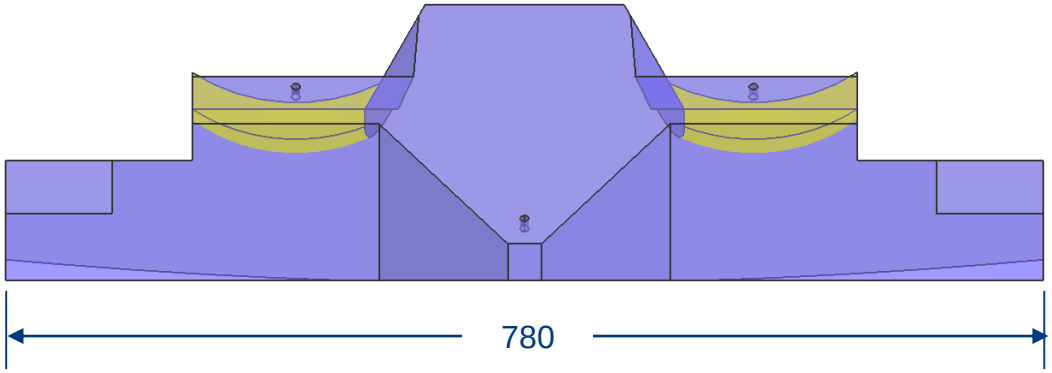


RIMFAX Antenna Envelope Rev H



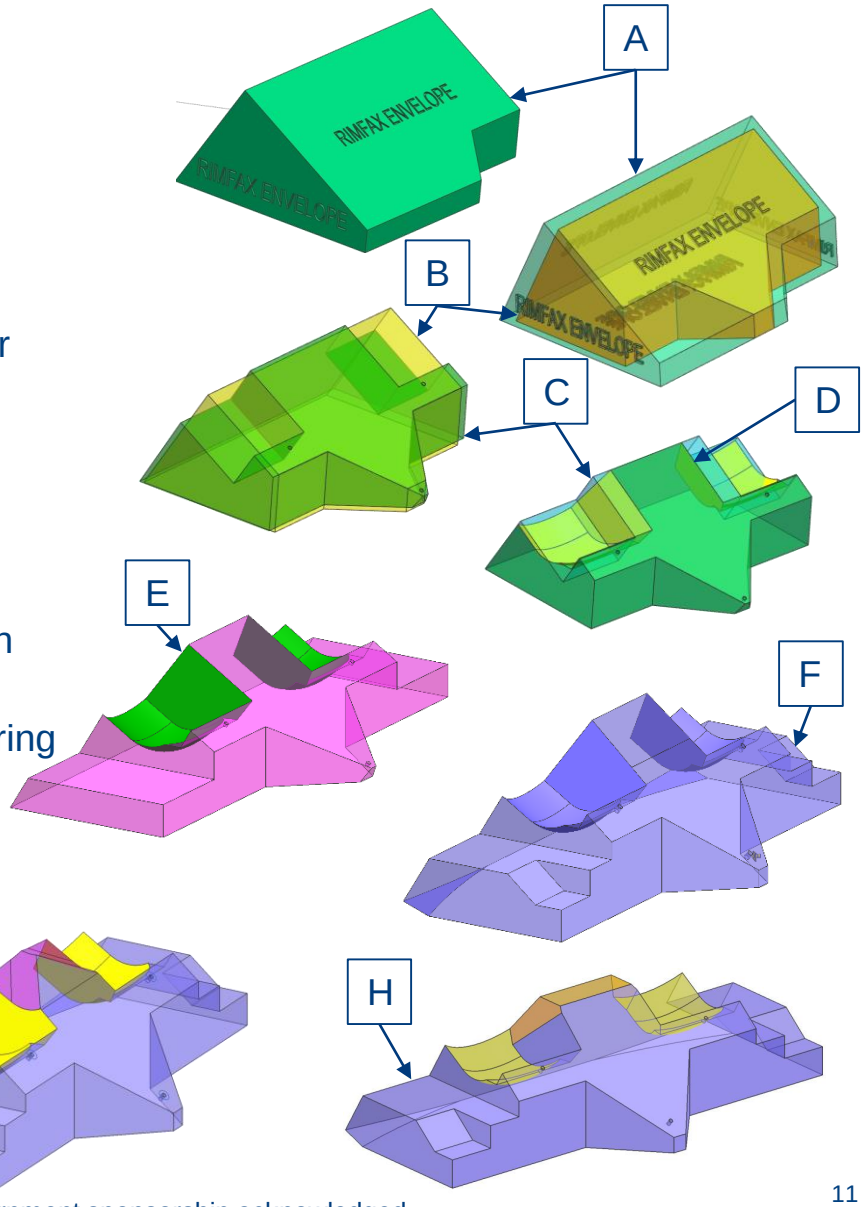






RIMFAX Antenna Envelope History

- Rev A: Move from Belly Pan to location under RTG
- Rev B: Revised to provide sufficient clearance to surrounding HW, was 1.6 mm to Cabling Bulkhead
- Rev C: Added rectangular cutouts for RTG integration clearance
- Rev D: Revised rectangular cutouts to swept cutouts for borescope clearance
- Rev E (rev 1): Added wings to extend antenna volume
- Rev F: Revised mounting plane angle due to aft panel shift with V18 Rover. Also increased overall height of antenna volume.
- Rev G: Added cutouts on peak for off-nominal approach during RTG integration
- Rev H: Re-shaped cutouts for off-nominal approach during RTG integration.



Volume Progression:
Rev A = 21.1 x10^6 mm^3
Rev B = 16.0 x10^6 mm^3
Rev C = 14.1 x10^6 mm^3
Rev D = 13.0 x10^6 mm^3
Rev E = 16.5 x10^6 mm^3
Rev F = 24.6 x10^6 mm^3
Rev G = 24.4 x10^6 mm^3
Rev H = 24.4 x10^6 mm^3